

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013597**Date Inspected:** 30-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 7BE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SEG036B-046, 047. The welder is identified as #220067 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SEG036C-044, 045. The welder is identified as #220069 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

Segment 7AW/7BW

This QA Inspector observed Base Metal repair using the Shielded Metal Arc Welding (SMAW) in progress at locations of removed fit up plates along the exterior of the Side Plate CJP splice, cross beam side. The welder is

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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identified as #045196 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for WR11052.

### Segment 7BE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD27-PP051-032. The welder is identified as #220066 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-T-2232-B-U2-F.

### Segment 7BW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD27-PP051-103. The welder is identified as #222396 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-T-2232-B-U2-F.

### Segment 7AE/7BE

This QA Inspector observed match drilling bolt holes of the Deck Plate U rib splice connection plates.

This QA Inspector observed ZPMC personnel performing Magnetic Particle Testing (MT) on the Deck Plate transverse CJP splice, exterior.

### Segment 7DE

This QA Inspector observed beveling of the Side Plate with a mechanical guided torch, bike path side.

This QA Inspector observed fit up of the Bottom Panel to FL3 flange at panel points 56-58 for match drilling of bolt holes.

### Segment 7BE/7CE

This QA Inspector observed ABF personnel performing Ultrasonic Testing (UT) of the Edge Plate transverse CJP splice, bike path side. D scan was performed.

ZPMC Quality Control (QC) Inspector is identified as Wang Li Yang. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations.

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## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hernandez,Dan
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Quality Assurance Inspector
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<b>Reviewed By:</b>	Carreon,Albert
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QA Reviewer
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